

## CLAIMS

- 006822-026612
1. Method of surface polishing of at least one principal surface of an optical article made from transparent thermoplastic material comprising a grinding step, a fine grinding step and a polishing step, characterized in that the fine grinding and/or polishing step consists of an attack on the principal surface of the article by a solvent or a mixture of organic solvents of the transparent thermoplastic material.
  - 5        2. Method characterized in that the attack constitutes the polishing step.
  - 10      3. Method according to claim 1 or 2, characterized in that the attack is performed by centrifugation of the solvent or mixture of solvents on the principal surface of the article.
  - 15      4. Method according to claim 3, characterized in that the solvent or mixture of solvents is deposited on the principal surface following a radial deposition.
  - 20      5. Method according to claim 4, characterized in that the radial deposition takes place from the centre to the edge of the article.
  - 25      6. Method according to claim 1 or 2, characterized in that the attack is performed by placing the principal surface in contact with the vapour of a solvent or mixture of solvents.
  - 30      7. Method according to claim 6, characterized in that the vapour is produced by heating the solvent or mixture of solvents.
  - 35      8. Method according to claim 7, characterized in that the solvent or mixture of solvents is heated to its boiling point.
  - 25      9. Method according to claim 6, characterized in that the contact of the principal surface with the vapour of the solvent or mixture of solvents is performed by saturation with the vapour of the solvent or mixture of solvents.
  - 30      10. Method according to claim 9, characterized in that the solvent vapour is at ambient temperature.
  - 35      11. Method according to claim 1 or 2, characterized in that the attack step comprises an attack by centrifugation and an attack in the vapour phase.
  - 40      12. Method according to claim 11, characterized in that the attack by centrifugation precedes the attack in the vapour phase.
  - 45      13. Method according to claim 11, characterized in that the attack by centrifugation follows the attack in the vapour phase.
  - 50      14. Method according to claim 8, characterized in that the optical article

is heated to a temperature lower than the boiling point of the solvent or mixture of solvents.

15. Method according to any of the preceding claims, characterized in that the solvent is selected from dichloromethane, the dichloroethanes, acetone,  
5 methyl ethyl ketone, trichloromethane, THF and dioxane.

16. Method according to any of the preceding claims, characterized in that the transparent thermoplastic material is polycarbonate.

17. Method according to any of the preceding claims, characterized in that the optical article is a spectacle lens.

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